

## WHAT IS CLAIMED IS:

1. A method for conforming a design with existing design requirements, the method comprising the steps of:

inserting limits into an input file of relevant design parameters;

5 inputting the input file into an analysis algorithm;

applying the analysis algorithm to perform calculations to generate an analyses output;

comparing the analyses output to the limits to generate a design output; and

10 issuing an alert indicative of whether the comparison identifies an exceedance of the limits.

2. A method as claimed in claim 1 wherein the limits comprise specified quantifiable limits.

3. A method as claimed in claim 1 wherein the step of  
15 inserting limits comprises the step of using a web-based tool to electronically read the limits.

4. A method as claimed in claim 1 wherein the step of comparing comprises the step of creating a sub-routine to automatically compare the analyses output with the  
20 limits.

5. A method as claimed in claim 4 wherein the analyses output comprises engineering calculations relevant to the design.

6. A method as claimed in claim 5 wherein the step of  
25 applying the analysis algorithm comprises the step of applying an exceedance detection algorithm.

7. A method as claimed in claim 6 wherein the exceedance detection algorithm indicates if an exceedance of a computer model engineering calculation is greater than the limits.

5 8. A method as claimed in claim 1 wherein the step of issuing an alert comprises the step of issuing an alert message to a user.

9. A method as claimed in claim 1 further comprising the step of outputting engineering specifications and performance results of the design.

10 10. A system for conforming a design with existing design requirements, the system comprising:

an input file containing at least predetermined design practice limits;

15 an analysis algorithm for comparing the input file with design criteria to generate an output;

an exceedance algorithm for comparing the output to the predetermined design practice limits; and

20 an alert indicator for indicating whether the exceedance algorithm comparison identifies an exceedance of the predetermined design practice limits.

11. A system as claimed in claim 10 wherein the predetermined design practice limits comprise specified quantifiable limits.

25 12. A system as claimed in claim 10 wherein the predetermined design practice limits are electronically readable.

30 13. A system as claimed in claim 12 further comprising a web-based tool to electronically read the predetermined design practice limits.

14. A system as claimed in claim 10 wherein the exceedance algorithm comprises a sub-routine to automatically compare the output with the predetermined design practice limits.

5 15. A system as claimed in claim 14 wherein the output comprises engineering calculations relevant to the design.

10 16. A system as claimed in claim 10 wherein the exceedance detection algorithm indicates when an exceedance of a computer model engineering calculation is greater than the predetermined design practice limits.

17. A system as claimed in claim 10 wherein the alert indicator comprises an alert message issued to a user.

15 18. A system as claimed in claim 10 further comprising engineering specifications and performance results of the design.